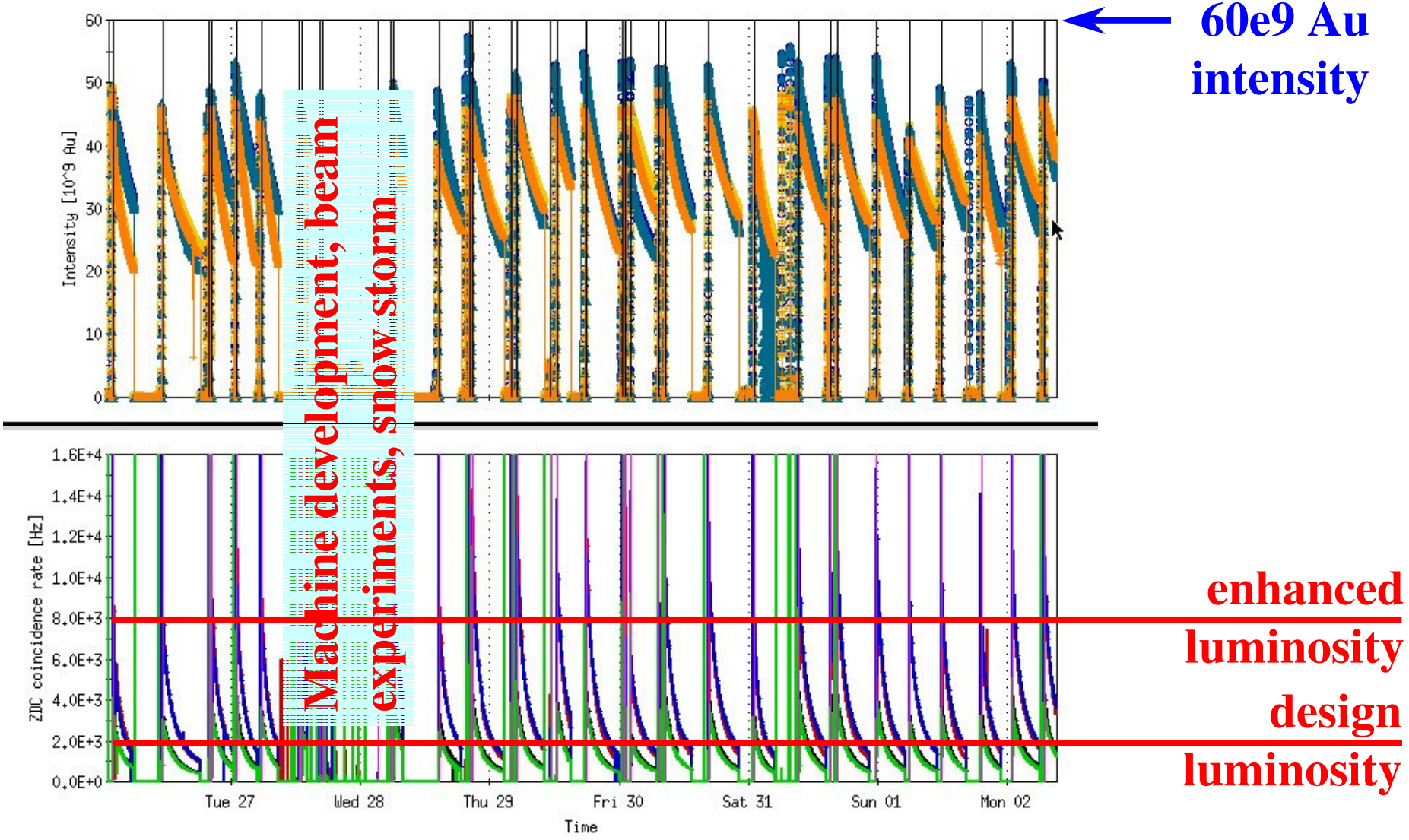
# Progress in last week:

1. Fast STAR magnet reversal (~2hrs) (Todd)
2. Blue Landau cavity operational (Mike Brennan)

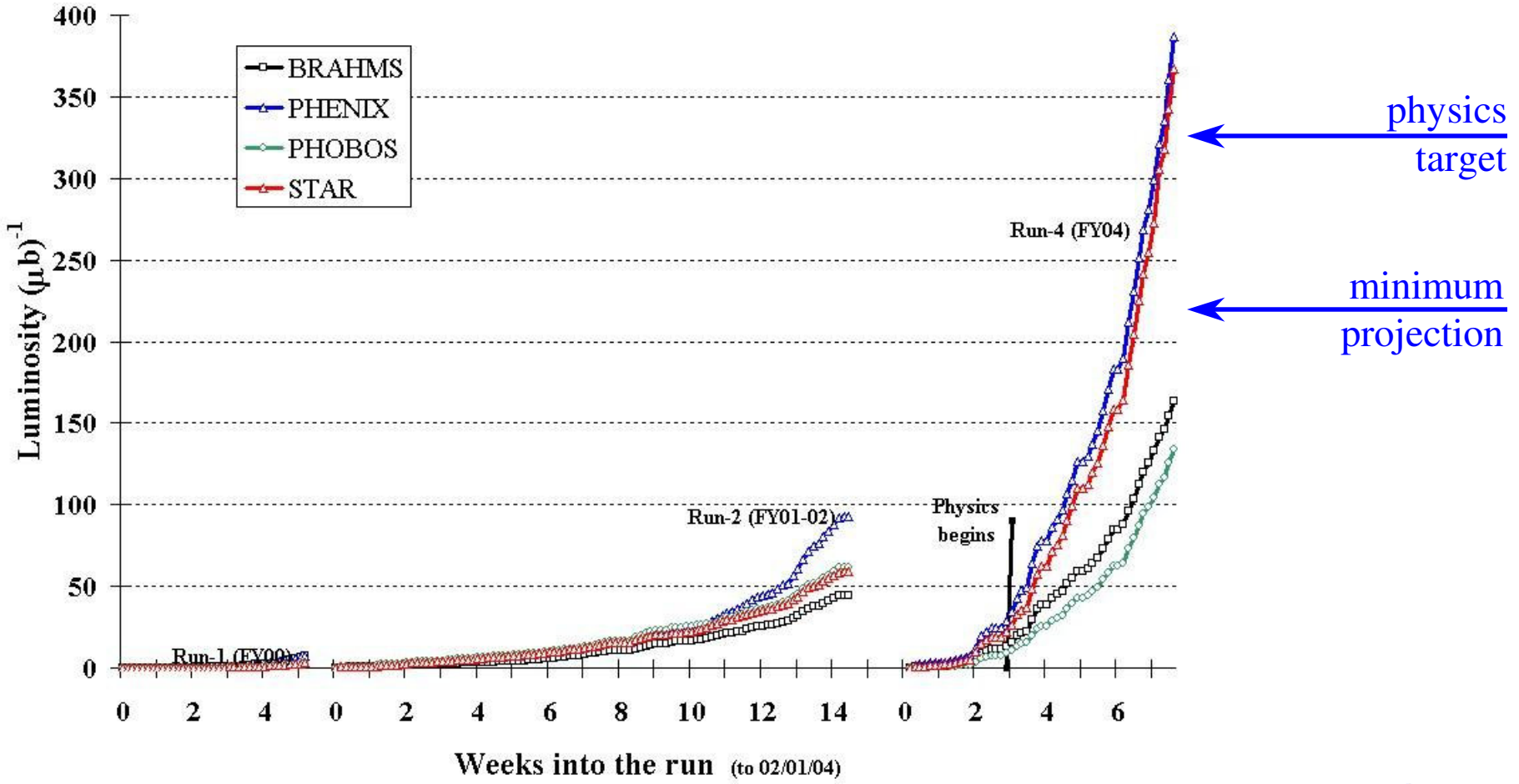
   → Needed for very high intensity bunches
   (after Booster bunch merge)
3. More efficient operation (Greg & shift crews)

# Stores during last week, Monday to Monday



Delivered 390 $(\mu b)^{-1}$ to Phenix [week ago: 251]
139 $(\mu b)^{-1}$ last week [week ago: 93]
**Target 325 $(\mu b)^{-1}$**

As of 02/01/04 24:00
Star ×0.9
Phobos ×0.3
Brahms ×0.4



## Some statistics (week 25-Jan to 1-Feb), no maintenance

- No of stores : 21
  Time in store : 100hrs (60% of calendar time)
- Average store time : 4.5hrs
  Rms store time : 1.5hrs
  Min store time : 1.1hrs
  Max store time : 7.1hrs
- Av. store-to-store time : 2.6hrs (excluding beam experiments)
  Rms store-to-store time: 1.9hrs
  Min store-to-store time: 0.5hrs
- Optimum store length : 2.9hrs (for zero detector turn-on time)

- No improvement in peak luminosity in next few weeks (vacuum limited)
- More integrated luminosity may come from
  - Optimized store length
  - Reduced store-to-store time (Greg Marr & Ops)

## Proposal:

- Start testing injectors 3.5hrs after steering
- **Dump store 4.0hrs after steering by default**

  [Could implement "reversed voting":
  keep store for another hour if 2 out of 4 experiments vote "keep"]

# Plan for the week:

1. Collimation on ramp
2. LISA parallel steering
3. Yellow Landau cavity
4. Booster bunch merge work
   (parallel to RHIC operation)
5. Optics and dispersion data at store

Medium term ideas (~weeks):
- Very high intensity bunches (>1.5e9)
- $\beta^* = 80$cm at Phenix

[requires some of the above to be finished sucessfully]